

| Activity Number | Action | Current Status | 2005 | 2006 | Outcome |
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| A. Standardization and enhancement of bycatch reporting methodologies, including data collection and monitoring | | | | | |
| A1 | Investigate baseline logbook and/or observer program in the Bluefin Tuna Purse Seine fishery. | Need to schedule discussion with logbook & observer programs to review needs/options. Part of HMS Operations Planning. | Implement recommendations if any, dependent on funding. | Evaluate data collected and cost-effectiveness. | Evaluate and characterize extent of bycatch in fishery. |
| A2 | Investigate pilot observer study in Harpoon fishery. | Need to schedule discussion with logbook & observer programs to review needs/options. Part of HMS Operations Planning. | Implement recommendations if any, dependent on funding. | Evaluate data collected and cost-effectiveness. | Evaluate and characterize extent of bycatch in fishery. |
| A3 | Evaluate (HMS) headboat mandatory observer coverage & baseline program. | Evaluating current FHS methodology & feasibility for HMS fisheries; compare to LPS observer option & past data collection. | Implement recommendations if any, dependent on funding. | Review data collected in 2005; continue data collection through end of contract. | Evaluate and characterize extent of bycatch in fishery. |
| A4 | Investigate bycatch-related data collection through the Large Pelagics Survey (LPS). | Task to LPS ad hoc review committee. | Implement new question(s) to survey instrument if recommended. | Review data collected in 2005; continue data collection through end of contract. | Evaluate and characterize extent of bycatch in fishery. |
| A5 | Evaluate trip vs set logbook reporting differences (e.g., snapper/grouper trip forms vs pelagic logbook set forms). | No action. | Discuss with SERO/SEFSC & NERO/NEFSC how to accomplish & responsibilities. | Analyze data. | Evaluate differences in bycatch estimates produced by each method. |
| A6 | Increase observer coverage in pelagic longline (PLL), bottom longline (BLL), and shark gillnet fisheries. | Activity scheduled for evaluation & implementation for 2005 dependent on funding. | Implement as funding allows. | Continue implementation as funding allows. | Enhance bycatch estimates. |
| A7 | Promote charterboat voluntary observer coverage & pilot program. | Activity scheduled for evaluation & implementation for 2005 dependent on funding. | Implement as funding allows. | Continue implementation as funding allows. | Enhance bycatch estimates. |

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| A8 | Increase sample sizes for MRFSS For-Hire/LPS Headboat survey. | Activity scheduled for evaluation & implementation for 2005 dependent on funding. | Implement as funding allows; pursue other potential resources. | Implement as funding allows; pursue other potential resources. | Increase data collection, evaluate extent of bycatch in fishery. |
| A9 | Pursue Tuna General and HMS Angling category bycatch data collection program. | Need to schedule discussion with logbook & observer programs to review needs/options. Part of HMS Operations Planning. | Discuss with SERO/SEFSC & NERO/NEFSC how to accomplish & responsibilities. | Implement as funding allows. | Evaluate and characterize extent of bycatch in fishery. |
| B. Research needs | | | | | |
| B1 | Investigate fishing protocols/gear modifications (artificial bait, circle hooks, etc) to reduce bycatch and bycatch mortality (non-sea turtle) in bottom longline, handgear, and pelagic longline fisheries. | Analyzing data from NED experimental fishery. | Planning discussions with various NOAA components to determine range and scope of additional research to be conducted. | Begin implementation of research projects as funding allows. | Promote sustainable fisheries through reduction of bycatch; export technology to other domestic and international fisheries. |
| B2 | Continue research on post-release mortality of HMS. | Continue funding release mortality research projects conducted by various partners. | Continue funding release mortality research projects as funding allows; evaluate data. | Continue funding release mortality research projects as funding allows; evaluate data. | Provide better estimates of bycatch/release mortality in HMS fisheries. |
| B3 | Increase research on role of apex predators in structuring marine ecosystems. | Continue funding Gulfspan & Coastspan research; explore increased funding & possible new sources? | Continue funding Coastspan research; explore increased funding & possible new sources? | Continue funding Coastspan research; explore increased funding & possible new sources? | Develop an ecosystem model to describe the role of apex predators (sharks). |
| C. Possible new bycatch management measures on a fishery-by-fishery basis | | | | | |
| C1 | Implement Amendment 1 (Shark Amendment) final measures (bottom longline time-area closure, VMS, line clippers, dipnets, de-hooking devices). | Final rule published Dec. 24, 2003 (68 FR 74746). VMS implemented on Nov 15, 2004 (69 FR51010). | Implementation ongoing; collect data to evaluate effectiveness of new measures; implement requirements for de-hooking devices. | Continue data collection; begin evaluation of effectiveness of new measures. | Determine effectiveness of management measures in reducing bycatch. |

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| C2 | Continue analyses of time-area closure effectiveness and investigate new or modified measures as appropriate. | Annual review included in SAFE Report; further analyses planned for development of Amendment 2 to the FMP for Atlantic Tunas, Swordfish, and Sharks. | Annual review to be included in SAFE Report; implement new or modified measures as necessary through Amendment 2. | Annual review to be included in SAFE Report; Amendment 2 implementation scheduled. | Determine effectiveness of time/area closures in reducing bycatch in HMS fisheries. |
| C3 | Evaluate applicability of bycatch reduction measures from Northeast Distant experimental fishery to the rest of the U.S. Atlantic pelagic longline fleet, other U.S. longline fleets, and on an international basis. | Implemented bycatch reduction measures throughout U.S. Atlantic PLL fleet; final rule published July 6, 2004 (69 FR 40734). | Evaluate applicability to other domestic fisheries such as the bottom longline fishery; promote international cooperation. | Implement measures in other domestic fisheries if warranted; continue to promote international cooperation. | Reduce bycatch and/or minimize bycatch mortality in other fisheries. |
| C4 | Investigate methods to reduce overcapacity. | Activity scheduled for evaluation & implementation for 2005 dependent on funding. | Develop alternatives for reducing overcapacity. | Evaluate and/or implement methods to reduce overcapacity. | Reduce overall effort in fisheries in order to minimize bycatch and bycatch mortality. |
| C5 | Implement new or modified bycatch management measures as appropriate. | Activity scheduled for evaluation & implementation for 2005 dependent on funding. | Ongoing activity based on evaluation of data. | Ongoing activity based on evaluation of data. | Reduce bycatch and/or minimize bycatch mortality in HMS fisheries. |

D. Education and outreach efforts

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| D1 | Develop handling & release techniques brochure. | Developed and printed brochures; distributed to permit holders in First Quarter FY05. | Continue distribution of brochures as necessary. | Continue distribution of brochures as necessary. | Provide regulatory requirements for handling and release of bycatch species. |
| D2 | Put all bycatch-related regulations, technology information, and related information on the NOAA Fisheries HMS bycatch website. | Ongoing activity | Ongoing activity | Ongoing activity | Provide bycatch-related information and materials to fishermen and public. |
| D3 | Prepare materials for trade shows and conferences for distribution. | Developed and distributed turtle release placards, brochures, protocols and video. | Develop and distribute new materials as needed; translate into additional languages; revise as needed. | Develop and distribute materials as needed. | Increase public understanding of bycatch issues and development/support for cooperative solutions to bycatch issues. |

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| D4 | Publicize the availability of HMS identification guide to fishermen, constituents, and interested parties. | Publicized availability via fax notice and press release; mailed copies to HMS Advisory Panel members, consulting parties, enforcement, others; distributed limited copies at Amendment 2 scoping meetings. | Continue to publicize availability of ID guide. | Continue to publicize availability of ID guide. | Enhance ability of fishermen, dealers, and the general public to correctly ID HMS species. |
| D5 | Conduct workshops for high priority fisheries. | Held nine workshops on turtle release guidelines & protocols along the Atlantic Coast and Gulf of Mexico. | Develop concept & materials for new workshops during development of Amendment 2; conduct workshops as needed. | Modify materials and conduct workshops as needed. | Share technology information on fishing protocols/gear modifications to reduce bycatch and bycatch mortality. |
| D6 | Attend trade shows & conferences where fishery participants attend. | Activity scheduled for evaluation & implementation for 2005 dependent on funding. | Attend trade shows & conferences; distribute outreach materials. | Attend trade shows & conferences; distribute outreach materials. | Increase communication with constituents; further goal of reducing bycatch while developing sustainable fisheries. |